## **Fire Safety Data**

Information provided by Ross Loder – Iowa Department of Public Safety December 1, 2006

We had some difficulty extracting the data, but ultimately we were able to get the following for 2005.

The number of incidents was higher than I expected, but the dollar value of losses and the number of injuries was lower than I thought it might be, suggesting that while the fires are numerous, they tend not to be major fires. Also, note that we did not query for various types of wildland fires which often result from open burning of brush, yard waste, and crop stubble since the present discussion is limited to trash.

Please keep in mind that these data only include incidents involving a response by a fire department, and even then not all fire departments report, so the true number of responses is understated, probably by about 30% or so.

# The number of trash fires/container trash fires for year 2005 were 1,674 with a dollar loss of \$43,939.

Only one (1) casualty was reported for year 2005 due to trash/container trash fires. That was a 15 year old girl in Mason City, Iowa. She was exposed to fire products and the severity of her injuries was moderate.

The actual breakdown was:

Outside rubbish fire-	351 incident	\$1,360
other		
Outside rubbish-trash or waste fire	820 incidents	\$5,560
Garbage dump or sanitary landfill fire	23 incidents	\$6,000
Construction or demolition landfill fire	43 incidents	\$201
Dumpster or other outside trash receptacle	429 incidents	\$30,768
Outside stationary compactor/compacted	8 incidents	\$50

## **ISO Ratings**

One of the items I promised to follow-up on was the question of whether the enactment and/or enforcement of a trash burn ban is a factor in the establishment of ISO fire ratings (scale of 1 to 10). The answer is no, a trash burn ban does not figure into ISO ratings at all. However, please keep in mind that an ISO rating is only one of many factors that are used by insurance companies in setting property insurance rates.

The ISO ratings are set by considering three main factors: Receiving and handling of fire alarms (10%), fire department (50%), and water supply (40%). The breakdown of considerations within each category is as follows:

#### **Items Considered in the FSRS**

The Fire Suppression Rating Schedule (FSRS) measures the major elements of a community's fire-suppression system and develops a numerical grading called a Public Protection Classification (PPCTM). Here's an outline of the items considered in the FSRS and the percentage weighting of each item in the calculation that leads to a PPC rating (CP abbreviated item descriptions to fit this on one page)

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Receipt of fire alarms by commercial telephone	2%
Operators	3%
Alarm dispatch circuits	5%
Receiving and handling of fire alarms total: 10%	
Fire department	
Pumpers	10%
Reserve pumpers	1%
Pump capacity	5%
Ladder/service	5%
Reserve ladder and/or service	1%
Distribution of companies	4%
Company personnel	15%
Training	9%
Fire department total: 50%	
Water supply	
Adequacy of water	35%
Hydrants: size, type, and installation	2%

3%

Water supply total: 40%

Hydrants: inspection and condition

### **Divergence**

Divergence — An inadequate water supply may limit the ability of even the best fire department to suppress fires. Similarly, an inadequate fire department may not be able to make effective use of an abundant water supply. So, if the quality of the fire department and the water supply are different, ISO adjusts the total score downward to reflect the limiting effect of the less adequate item on the better one.

Survey total: 100%